

<b>Notice of Allowability</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	10/678,065	INABA ET AL.	
	<b>Examiner</b>	<b>Art Unit</b>	
	Miranda Le	2167	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--**

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to 09/07/2005.
2. ☒ The allowed claim(s) is/are 12-19, 21-22, now renumbered as 1-10.
3. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
  - a) ☐ All    b) ☐ Some\*    c) ☐ None    of the:
  1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

\* Certified copies not received: \_\_\_\_\_.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

**THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.**

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
  5. ☐ CORRECTED DRAWINGS ( as "replacement sheets") must be submitted.
    - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review ( PTO-948) attached
      - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date \_\_\_\_\_.
    - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date \_\_\_\_\_.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

**Attachment(s)**

- |   |  |
|---|--|
| 1. <input type="checkbox"/> Notice of References Cited (PTO-892)  | 5. <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)            |
| 2. <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                | 6. <input type="checkbox"/> Interview Summary (PTO-413),<br>Paper No./Mail Date _____. |
| 3. <input type="checkbox"/> Information Disclosure Statements (PTO-1449 or PTO/SB/08),<br>Paper No./Mail Date _____ | 7. <input checked="" type="checkbox"/> Examiner's Amendment/Comment                    |
| 4. <input type="checkbox"/> Examiner's Comment Regarding Requirement for Deposit<br>of Biological Material          | 8. <input type="checkbox"/> Examiner's Statement of Reasons for Allowance              |
|   | 9. <input type="checkbox"/> Other _____.   |

Miranda Le  
January 05, 2006

### EXAMINER'S AMENDMENT

1. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Mr. Daniel J. Stanger on December 19, 2005.

2. The application has been amended as follows:

**In the claim:**

- Cancel claim 20.
- Claims 12, 14-19, 21-22 have been amended as:

12. (Currently amended) A document retrieval method, involving a series of document retrieval processes including a plurality of retrieval operations inputted by a user, comprising:

a user's evaluation input step for inputting a user's evaluation of a document retrieved in a document search conducted pursuant to a search query, said user's evaluation including an evaluation as to whether the document is desirable for the user's search purpose;

a search query storage step for, when updating said search query based on said evaluation, storing a search query after the update in association with the retrieval operation thereof, in addition to those search queries that have been stored in previous retrieval operations conducted before said update in said series of document retrieval processes;

a search result storage step for storing a search result based on the search query after the update in addition to those search results that have been stored in previous retrieval operations conducted before said update in said series of document retrieval processes; and

a search history storage step for storing information on a history of the search queries each stored in said search query storage step, information on a history of search results each stored in said search result storage step, and each of user's evaluations and each of identifiers of documents subjected to said evaluations by making a correspondence among the search query, the search result, the user's evaluation and the identifier of the document subjected to the user's evaluation;

wherein a user's evaluation for a search result document is inputted in accordance with a method for setting one or more evaluation grades, the search query includes weights assigned to strings and the weight of a string is updated in accordance with a method for setting the degree of change in many grades pursuant to said evaluation.

14. (Currently amended) A document retrieval method according to claim 12, further comprising a search result history display step for delivering a document delivered as a search result before said search ~~condition~~ query is updated on the basis of said evaluation even after said search ~~condition~~ query is updated, on the basis of the information stored in said search history storage step.

15. (Currently amended) A document retrieval method according to claim 13, further comprising a search ~~condition~~ query restoration step for restoring, of the evaluation history

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delivered in said evaluation history display step, a search ~~condition~~ query before a desired evaluation is inputted.

16. (Currently amended) A document retrieval method according to claim 13, further comprising a search ~~condition~~ query update step for inputting an evaluation to evaluate a document delivered in said evaluation history display step as desirable or undesirable and updating said search ~~condition~~ query on the basis of said evaluation input in said search ~~condition~~ query update step.

17. (Currently amended) A document retrieval method according to claim 13, further comprising a user evaluation erase step for erasing a desired one of said evaluations as to desirability or undesirability inputted by the user in said evaluation history display step, in accordance with a request from the user, and updating the search ~~condition~~ query to the state available when said evaluation is not made.

18. (Currently amended) A document retrieval method according to claim 14, further comprising a search ~~condition~~ query update step for causing the user to input an evaluation to evaluate the document delivered in said search result history display step as desirable or undesirable so as to update said search ~~condition~~ query on the basis of said evaluation input of said search ~~condition~~ query update step.

19. (Currently amended) A document retrieval method according to claim 18, further comprising a user evaluation erase step for erasing a desired evaluation as to desirability or undesirability inputted by the user and delivered in said search result history display step, in accordance with a request from the user and updating weights of strings in the search ~~condition~~ query to the state available when said evaluation is not made.

20. (Canceled)

21. (Currently amended) A document retrieval system, adapted to perform a series of document retrieval processes including a plurality of retrieval operations inputted by a user, comprising:

user's evaluation input means for inputting a user's evaluation of a document retrieved in a document search conducted pursuant to a search query, said user's evaluation including an evaluation as to whether the document is desirable for the user's search purpose;

search query storage means for storing, when said search query is updated based on said evaluation, a search query after the update in association with the retrieval operation thereof, in addition to those search queries that have been stored in previous retrieval operations conducted before said update in said series of document retrieval processes;

search result storage means for storing a search result based on the search query after the update in addition to those search results that have been stored in previous retrieval operations conducted before said update in said series of document retrieval processes; and

search history storage means for storing information on a history of the search queries each stored by said search query storage means, information on a history of search results each stored by said search result storage means, and each of user's evaluations and each of identifiers of documents subjected to said evaluations by making a correspondence among the search query, the search result, the user's evaluation and the identifier of the document subjected to the user's evaluation;

wherein a user's evaluation for a search result document is inputted in accordance with a method for setting one or more evaluation grades, the search query includes weights assigned to strings and the weight of a string is updated in accordance with a method for setting the degree of change in many grades pursuant to said evaluation.

22. (Currently amended) A computer-readable recording medium storing a document retrieval program which, when executed by a computer, causes the computer to perform a document retrieval method involving a series of document retrieval processes including a plurality of retrieval operations inputted by a user, the method performed according to the program comprising:

a user's evaluation input step for inputting a user's evaluation of a document retrieved in a document search conducted pursuant to a search query, said user's evaluation including an evaluation as to whether the document is desirable for search purpose;

a search query storage step for storing, when updating said search query based on said evaluation, a search query after the update in association with the retrieval operation thereof, in

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addition to those search queries that have been stored in previous retrieval operations conducted before said update in said series of document retrieval processes;

a search result storage step for storing a search result based on the search query after the update in addition to those search results that have been stored in previous retrieval operations conducted before said update in said series of document retrieval processes; and

a search history storage step for storing information on a history of the search queries each stored in said search query storage step, information on a history of search results each stored in said search result storage step, and each of user's evaluations and each of identifiers of documents subjected to said evaluations by making a correspondence among the search query, the search result, the user's evaluation and the identifier of the document subjected to the user's evaluation;

wherein a user's evaluation for a search result document is inputted in accordance with a method for setting one or more evaluation grades, the search query includes weights assigned to strings and the weight of a string is updated in accordance with a method for setting the degree of change in many grades pursuant to said evaluation.

3. The following is an examiner's statement of reasons for allowance:

The present invention is directed to a document retrieval method for inputting a user's evaluation for a document retrieved on the basis of a designated search query and changing said search query on the basis of said evaluation, whereby the retention of evaluations by the user as to whether search results obtained from a series of retrieval operations are desirable, as well as

the retention of the search conditions generated by the system aide based on the decisions so that the search conditions may be re-used from the view point of conducting re-retrieval operations.

Claims 1, 15, 16 identify the uniquely distinct feature of “wherein a user’s evaluation for a search result document is inputted in accordance with a method for setting one or more evaluation grades, the search query includes weights assigned to strings and the weight of a string is updated in accordance with a method for setting the degree of change in many grades pursuant to said evaluation”.

The closest prior art, Aoki et al. (U.S. Patent No. 6,078,913), shows a substantially similar document retrieval method for retrieving desired documents from documents stored in a plurality of computers connected in a network at high speed, wherein the degrees of similarity in all documents are calculated, and the similar documents are linked closely with each other. However, Aoki et al. fail to anticipate or render the above-cited limitations obvious.

4. Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled “Comments on Statement of Reasons for Allowance”.

### *Conclusion*

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Miranda Le whose telephone number is (571) 272-4112. The examiner can normally be reached on Monday through Friday from 8:30 AM to 5:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jean Homere, Esq., can be reached on (571) 272-3780. The fax number to this Art Unit is 571-273-8300.



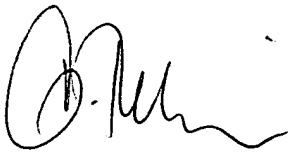
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Any inquiry of a general nature or relating to the status of this application should be directed to the Group receptionist whose telephone number is (703) 305-3900.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Miranda Le  
January 5, 2006



INFORMATION  
IN DECEMBER